

REMARKS

This Amendment is in response to the final Office Action dated April 5, 2006. Entry of this amendment is believed appropriate as it is believed to place the application in condition for allowance. In the amendment, claims 3, 5, 8, 9, 10 and 11 have been amended and claims 24-29 have been added, such that claims 3-6, 8-11 and 18-29 remain pending in the application. Reconsideration of the pending claims in light of this amendment and the following remarks is respectfully requested.

These amendments add no new matter. Implementation of intra-frame encoding for the special playback data is described in connection with the background description, such as at paragraph [0012] of the specification as found in publication US 2002/0023269, and corresponding description of splicing is found in the same publication, such as at paragraphs [0064] through [0072].

Claims 3-6, 8-11 and 18-23 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,828,370 to Mueller ("Mueller") in view of U.S. Pat. No. 6,658,199 to Hallberg ("Hallberg") and U.S. Pat. No. 6,029,045 to Picco et al. ("Picco"). This rejection is traversed.

Independent claim 3 now recites: *[a] data distribution apparatus comprising:*

receiving means for receiving a special playback request from an external source;

data storage means for storing playback data, and also storing special playback data and splicing data, both of which are used for playing back the playback data in a special mode, wherein intra-frame encoding is used for a substantial portion of the special playback data;

data switching means for selectively outputting the playback data, the special playback data and the splicing data from said data storage means for transmission to a buffer of a data receiving terminal, wherein the splicing data is inserted as the selective output for transmission to the buffer such that a locus of used bits of the buffer is continuous when switching between the playback data and the special playback data, and wherein the insertion of the splicing data accounts for intra-frame encoding being used for a substantial portion of the special playback data; and

transmission means for transmitting the selective output from said data switching means to the data receiving terminal via a transmission medium.

These claimed features are not disclosed or suggested by Mueller, Hallberg, and/or Picco, alone or in combination.

Mueller discloses a system and method for displaying a graphical icon on a display screen. A user manipulates a cursor within a slider bar using a remote control. The set top box receives and processes the signals and provides the information resulting from the user's action to a video server that delivers compressed video streams as dictated by the user's manipulation of the cursor.

As the Examiner notes, Mueller fails to disclose the splicing data being inserted as selective output for transmission to the buffer such that the locus of used bits in the buffer is continuous when switching between playback and special playback data. (Office Action, at p. 3).

Applicant concurs with this conclusion, but also notes that the slider bar control of Mueller is clearly deficient in various regards. Mueller does not disclose switching to selectively output the playback data, the special playback data and the splicing data as claimed. It follows that Mueller also is devoid of any disclosure of insertion of the splicing data as the selective output for transmission to the buffer of the receiving terminal. At most, Muller discloses an index that points to different positions in a stream used for playback. This eases mode switching, but does not disclose or even suggest the above-described features.

Hallberg does not remedy the deficiencies of Mueller. Hallberg accommodates smooth trick play by reducing the number of frames in the trick play GOP until the system is capable of transmitting the trick play GOP within the constraints imposed for processing MPEG video in the forward mode at standard speed. (Mueller, 6:58-7:25). Thus, Hallberg merely teaches a reduction in the number of frames in the trick play mode to ensure that processing can be accommodated according to the standard mode constraints.

It is not clear what, if anything, Hallberg teaches with regard to Applicant's claimed invention. Indeed, as the Examiner also notes, even the combination of Mueller and Hallberg would fail to disclose the splicing data being inserted as selected output for transmission to the buffer such that the locus of used bits in the buffer is continuous when switching between the playback data and special playback data, as claimed by Applicant. (Office Action, at p. 4).

Picco does not remedy the deficiencies of Mueller and Hallberg. Picco discloses a technique that allows a broadcaster to insert local content into programming content, so that the broadcaster can provide targeted content to its users. (See, *e.g.*, Picco at 2:49-58). A splicer is used to introduce the local content into the program content stream. To accommodate splicing, some reformatting of the stream is used. Specifically, the image frame immediately before and after the insertion point of the local content is formatted as an intra-coded “I” frame. (Picco, at 11:49-62). This avoids a destruction of the predictive encoding. (Picco, at 12:1-3).

Accordingly, Picco merely inserts local content into the programming content. There is no data switching between playback data, special playback data and splicing data as claimed by Applicant. Moreover, Picco in no way discloses the insertion of *splicing data* as selective output such that the locus of used bits in the buffer is continuous when switching between the playback data and the special playback data. At most, the I-frame reformatting in Picco prevents a predictive frame problem from occurring. Even if this reformatting is somehow construed as “splicing data”, the splicing data is not inserted such that continuity of the locus of bits is ensured, as claimed by Applicant.

Applicant also notes that Picco merely splices similar data, albeit “local”, into the program stream, and thus does not deal with the same problem as Applicant’s claimed invention. That is, the special playback data is substantially intra-frame encoded.

Picco makes a general reference that the splicer “may also maintain the buffer flows, as described below.” (Picco, at 11:62-63). However, Picco offers no actual description as to how the splicer would maintain buffer flows. There is no mention of even the problem that could be presented through the introduction of the type of “special playback data” claimed by Applicant, let alone any details of a solution in that regard. Moreover, there is no mention whatsoever of inserting splicing data so as to ensure continuity of the locus of bits as claimed by Applicant.

Since even a combination of Mueller, Hallberg and Picco would still fail to disclose features that are recited in Applicant’s independent claim 3, Applicant maintains that the Examiner has not presented a *prima facie* case of obviousness for that claim.

Applicant also notes that there is no objective and reasonable motivation to combine the references in the offered fashion. The ordinarily skilled artisan would not be motivated to modify the slider bar based control of Mueller, with the trick play frame rate reduction technique of Hallberg, and the local content insertion technique of Picco to arrive at Applicant’s claimed

invention.

Independent claims 5 and 8-11 are also neither disclosed nor suggested by Mueller, Hallberg, or Picco, for reasons similar to those provided regarding claim 3 above. The dependent claims are also not disclosed or suggested by the relied-upon references, for their incorporation of the features recited in the respective independent claims, as well as their own separately recited, distinct features.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of the claims under 35 U.S.C. § 103(a), as being unpatentable over Mueller in view of Hallberg and Picco.

For the foregoing reasons, reconsideration and allowance of the claims that remain in this application are solicited. If any further issues remain, the Examiner is invited to telephone the undersigned to resolve them.

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